



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/628,569

07/29/2003

Yannis Labrou

1634.1004

4126

21171 7590 06/23/2010
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

WEST, THOMAS C

ART UNIT

PAPER NUMBER

3621

MAIL DATE

DELIVERY MODE

06/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/628,569	Applicant(s) LABROU ET AL.	
	Examiner THOMAS WEST	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4-1-10</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Status of Claims

1. This is in response to the Arguments/Remarks filed February 24, 2010. Claims 1-37 are currently pending and have been examined.

Information Disclosure Statement

2. The Information Disclosure Statements filed on April 1, 2010 have been considered. Initialed copies of the Form 1449 are enclosed herewith.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 37 recite "permanent storage", without any description regarding such in the specification, rendering it indefinite.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3621

6. Claims 1-7, 15, 16, 27, 35-36, 37 are rejected under U.S.C. §103(a) as being unpatentable over Mizrah, U.S. Patent No. 7,379,916, in view of Hird U.S. Patent No. 2002/0141575, in view of Nagel, U.S. Patent No. 7181017.

Claims 1, 3, 37:

Mizrah discloses:

a mobile device of the consumer, the consumer mobile device comprising a storage storing a consumer mobile device parameter and a computer controller (see col. 10, lines 44-57, POS, communication devices, mobile phones, enter PIN (controller))

a device of the merchant (see col. 10, lines 44-57, POS);

a trusted secure transaction server (STS) device of the third party, the STS device comprising a computer controller (see col. 9, lines 34-38 financial institution);

wherein the consumer mobile device and the STS device controllers verify a purchase transaction between the merchant and the consumer over the open and non-secure wireless

communication channel (see col. 7, lines 1-12 verify transaction, col. 16, lines 1-12 non-secure communication, col. 19, lines 1-8 wireless connections)

based upon a key derived from both the first input non-transmitted parameter of the consumer mobile device and the second generated non-transmitted parameter of the consumer mobile device and (col. 6, lines 24-47)

Art Unit: 3621

verifying a purchase transaction over the open and non-secure wireless communication channel (col. 14, lines 5-22)

Mizrah discloses the limitations shown above. Mizrah does not directly disclose a changing key or mutual authentication but Nagel does:

changing key (session key) (col. 19, lines 13-39)

identifying both the consumer mobile device and the consumer to the STS device (see col. 51, lines 1-15 two-way encryption authentication)..

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mizrah to include the session key and authentication of Nagel since this further secures a non-secure wireless channel .

Mizrah discloses the limitations shown above. Mizrah does not directly disclose non-transmitted parameters, but Hird does:

generating a second parameter based upon the stored consumer mobile device parameter as a second generated non-transmitted parameter (paragraph 13)

prompting input of a single parameter not to be stored in a permanent storage of the consumer mobile device as a first input non-transmitted parameter, (paragraph 52 input value PIN, masked value);

a permanent storage storing the first inputted non-transmitted parameter of the consumer mobile device and storing the consumer mobile device parameter (paragraph 52 input value PIN, masked value)

Art Unit: 3621

based upon both the first input non-stored and non-transmitted parameter input to the consumer mobile device and at the second stored and non-transmitted parameter of the consumer mobile device (paragraph 52 input value PIN, masked value)

a storage storing a second non-transmitted parameter; (see paragraph 52 masked value)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mizrah to include the non-transmitted parameters of Hird since this allows for increased transaction security and reduces the possibility of replay attacks.

2. The computer system as in claim 1, wherein the wireless communication channel is a local wireless network and the consumer mobile device comprises a local wireless network interface connecting to the local wireless network (see col. 6, lines 33-36, wireless personal organizer).

4. The computer system as in claim 3 wherein the consumer mobile device executes a web browser application providing a user interface to the purchase transaction, a purchasing application executing the verifying and a submit receipt application generating a receipt of the purchase transaction (see col. 6, lines 30-33, GUI/URL, col. 1, lines 42-44, selling slip).

5. The computer system as in claim 2, wherein the communication network in communication with the merchant device and the STS device is a wire and/or a wireless

Art Unit: 3621

network, and the merchant device further comprises a wire and/or wireless network interface connecting to the wire and/or wireless network in communication with the STS device, (see col. 10, lines 15-21, POS, communication lines)

wherein the merchant device executes a merchant retail application program providing a user interface to the purchase transaction and a purchasing application program executing the verifying (see col. 17, lines 11-20, program module, POS).

6. The computer system as in claim 4, wherein the consumer mobile device comprises a lightweight processor with storage executing the purchase application, the web browser, and the submit receipt application (see col. 19, lines 9-16, smart card, (inherently lightweight processor), and the consumer mobile device further comprises: a battery; a display; and means for a user to input information including navigation buttons or a touch screen of the display (see col.10, lines 44-50, URL/GUI, (mobile device inherently contains a battery)).

7. The computer system as in claim 6, wherein the consumer mobile device is credit card sized of approximately 55mm x 85 mm and approximately 10mm thick or thinner (see col. 19, lines 9-16, smart card).

Art Unit: 3621

15. The computer system as in claim 6, wherein the consumer mobile device interfaces to a remote display located remotely from the consumer mobile device, on the merchant device (see col. 12, lines 45-51, merchant POS authorization session).

16. The computer system as in claim 6, wherein the consumer mobile device is a Personal Digital Assistant (PDA) or a mobile phone (see col. 6, lines 33-36, wireless personal organizer).

27, 28. wireless communication channel between the consumer mobile device and the merchant device is a cellular telephone network and the consumer mobile device associates with the purchase transaction, as proximity binding of the consumer (see col. 7, lines 41-53, matching transaction parameters).

the merchant device executes a physical goods purchase as the purchase transaction and associates, as a binding, the physical goods purchase with the consumer mobile device (see col. 7, lines 41-53, matching transaction parameters).

29. The computer system as in claim 28, wherein the controller of the merchant device partitions software execution by executing the merchant retail application program and the purchasing application program executing the Protocol verifying in separate processing partitions (see col. 17, lines 11-20, program module).

Art Unit: 3621

30. The computer system as in claim 29, wherein the wire and/or wireless network between the STS device and the merchant device is a secure network connection channel (see col. 8, lines 36-38, secure transaction).

31. The computer system as in claim 30, wherein the secure network connection to the STS device is over Internet (see col.10, lines 44-50).

32. The computer system as in claim 31, wherein the secure network connection channel to the STS device is wireless (see col. 8, lines 36-39, secure wireless transaction).

35. The computer system of claim 1, wherein the STS device includes a secure physical environment protecting integrity of the consumer and merchant accounts (see col. 8, lines 36-39, secure transaction).

36. The computer system of claim 35 further comprising a plurality of STS devices handling varying processing load and access demands according to geographic constraints (see col. 6, lines 1-3).

7. Claims 8, 10, 11, 17-26, 33, 34 are rejected under U.S.C. 103(a) as being unpatentable over, Mizrah, U.S. Patent No. 7,379,916, in view of Hird, U.S. Patent No. 2002/0141575, in view of Drummond, U.S. Patent No. 7,025,256.

Claims 8, 10, 11, 17 – 26, 33, 34.

Mizrah discloses:

10. The computer system as in claim 9, wherein the purchase transaction is for purchase of a physical good or a token presentation (see col. 4, lines 7-8, buy/sell transaction).

11. The computer system as in claim 10, wherein the consumer mobile device includes means for indicating readiness to authorize payment including one or more of a "Pay" button or a touch screen "Pay" button (see col. 4, lines 21-30, buy/sell transaction authorization)

Mizrah discloses the limitations shown above. Mizrah does not directly disclose non-transmitted parameters, but Drummond does:

the local wireless network interface of the consumer mobile device is WiFi and the computer system further comprises a WiFi access point operated by the merchant device and the merchant device provides a directory service on the local wireless network (see col. 6, lines 28-47, wireless access point).

the local wireless interface of the consumer mobile device includes IR and the computer system further comprises an IR access point operated by the merchant device (see col. 6, lines 28-47, lines, IR).

the local wireless interface of the consumer mobile device includes WiFi and the computer system further comprises one or more WiFi access points operated by

Art Unit: 3621

another party as a hotspot application (see col. 6, lines 28-47, other wireless network interfaces, (hotspot is inherent to a WiFi network)).

the local wireless interface of the consumer mobile device includes WiFi and the computer system further comprises one or more WiFi access points operated by another party as a hotspot application (see col. 6, lines 28-47, other wireless network interfaces).

the local wireless interface of the consumer mobile device includes Bluetooth and the computer system further comprises one or more access points operated by another party as a hotspot application (see col. 6, lines 28-47, other wireless network interfaces, Bluetooth).

the local wireless interface of the consumer mobile device includes IR and the computer system further comprises one or more access points operated by another party as a hotspot application (see col. 6, lines 28-47, IR).

the local wireless interface of the consumer mobile device UWB and the computer system further comprises one or more access points operated by another party as a hotspot application (see col. 6, lines 28-47, plurality of wireless devices).

multiple local wireless network access points operated by another party but granting access to the merchant device and the consumer mobile device (see col. 6, lines 28-47, plurality of wireless devices).

the local wireless interface of the consumer mobile device is a point-to-point connection based on IR (see col. 6, lines 28-47, IR).

Art Unit: 3621

multiple local wireless network access points operated by the merchant and granting access to the consumer mobile device (see col. 6, lines 28-47, plurality of wireless devices).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mizrah to include the IR and wireless technology of Drummond since this allows for flexibility in wireless and IR offerings to the consumer.

With regard to the limitations below, Drummond discloses various wireless interface technologies. Drummond does not specifically disclose UWB and Zigbee. However, the Examiner takes **Official Notice** that it is old and well known in the computer communication art that various wireless technologies exist, such as Bluetooth, UWB and Zigbee. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Drummond with the elements of UWB and Zigbee because these are wireless technologies that can be utilized as communication interfaces by design choice.

the local wireless interface of the consumer mobile device includes UWB and the computer system further comprises a UWB access point operated by the merchant device.

the local wireless interface of the consumer mobile device includes Zigbee and one or more access points operated by another party as a hotspot application

Art Unit: 3621

the local wireless interface of the consumer mobile device includes Zigbee and the computer system further comprises a Zigbee access point operated by the merchant device

the wireless network interface of the consumer mobile device can be any of, WiFi, Bluetooth, UWB, IR, Zigbee, or other local wireless network interface, or a cellular telephone network

8. Claim 9 is rejected under U.S.C. §103(a) as being unpatentable over, Mizrah, U.S. Patent No. 7,379,916, in view of Hird U.S. Patent No. 2002/0141575, in view of Drummond, U.S. Patent No. 7,025,256, and in further view of Beigel, U.S. Patent Application No. 20030174049.

Claim 9

Mizrah/Drummond disclose the limitations as shown above. Mizrah/Drummond does not directly disclose speech or RFID technology, but Beigel teaches:

the consumer mobile device associates, as a proximity binding, with the purchase transaction, based upon one or more of a barcode display, a barcode, an RF-ID tag or location determination (paragraph 2, RFID).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mizrah/Drummond to include the speech and RFID technology of Beigel since this allows for a speech interface and RFID transaction binding, which further enhances the user interface options and transaction binding options.

9. Claims 12-14 are rejected under U.S.C. §103(a) as being unpatentable over, Mizrah, U.S. Patent No. 7,379,916, in view of Hird U.S. Patent No. 2002/0141575 and in further view of Beigel, U.S. Patent Application No. 20030174049.

Mizrah disclose the limitations as shown above. Mizrah/Drummond does not directly disclose speech or RFID technology, but Beigel teaches:

the consumer mobile device is without a display and comprises means for communicating output including synthesized speech (paragraph 52).

the consumer mobile device is without buttons or a touch screen and comprises input means including a microphone processing input by speech recognition and output means for communicating output including synthesized speech (paragraph 52).

the consumer mobile device further comprising a biometric sensor identifying a user according to one or more of fingerprint or face recognition (paragraph 29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mizrah/Drummond to include the speech and RFID technology of Beigel since this allows for a speech interface and RFID transaction binding, which further enhances the user interface options and transaction binding options.

Response to Arguments

5. Applicant's arguments filed February 24, 2010 have been fully considered but moot in light of the new grounds of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas West whose telephone number is 571-270-1236. The examiner can normally be reached on Tuesday and Wednesday 7:30am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thomas West
Patent Examiner
Art Unit 3621

/ANDREW J. FISCHER/
Supervisory Patent Examiner, Art Unit 3621